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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,063	08/17/2006	Jan Wittenber	PHUS040028US2	9776

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EXAMINER

WILSON, BRIAN P

ART UNIT	PAPER NUMBER
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2612

MAIL DATE	DELIVERY MODE
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07/07/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/598,063	WITTENBER ET AL.	
	Examiner	Art Unit	
	Brian Wilson	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06/17/2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11, 16 and 21-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 16 and 21-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>08/17/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Summary

1. This communication is in response to Arguments filed on 06/17/2009. No claims have been added, or cancelled.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

3. Claims 1, 21, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by West (U.S. Pub 2002/0013517).

Regarding claim 1, West disclose a method for paging/finding met by (Fig. 2; 20 & [0073, lines 11-15] note, audible notification to patient), determining status of radio module met by (Fig. 24; 540; note, detect loss of communication & [0137]), a wireless Patient-Monitoring Device PMD met by (Fig. 2; 22b), WLAN network met by (Fig. 2; 30), dual-communication met by (Fig. 2; 30; [0038] note, access points convey communication between patient monitors and central monitoring stations), access points met by (Fig. 2; 26), central-monitoring station met by (Fig. 2; 24), overall status of the PMD comprises one meta-state met by (Fig. 24; 540, 560; note, wireless communication is either connected or not connected), selecting a particular PMD for changing a meta-state met by (Fig. 24; 560; note, restore wireless communication & [0137]), activating audial-code function of the particular PMD met by ([0073] note, speaker, microphone, buzzer, siren, etc..) to emit a predetermined first audial-code met by ([0073] note, an audible

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notification to a clinician, patient, or other user of the monitor & [0083] note, audible messages or signals; note, it is inherent that the controller and audio I/O device need different codes to produce a variety of audible messages, signals or notifications).

Regarding claim 21, the claim is interpreted and rejected as claim 1.

Regarding claim 24, West discloses a Patient Monitoring Device PMD met by (Fig. 7), radio module met by (Fig. 7; 104, 90), dual-communication met by (Fig. 2; 30; [0038] note, access points convey communication between patient monitors and central monitoring stations), central monitoring station met by (Fig. 1; 24), access point met by (Fig. 1; 26), processor met by (Fig. 7; 100 & [0145-0146] & [0137]), audial-code function met by ([0073] note, speaker, microphone, buzzer, siren, etc.), audio signal met by ([0073] note, an audible notification to a clinician, patient, or other user of the monitor & [0083] note, audible messages or signals; note, it is inherent that the controller and audio I/O device need different codes to produce a variety of audible messages, signals or notifications).

Claim Rejections - 35 USC § 103

4. Claims 2-3, 5-7, 11, 16, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over West (U.S. Pub 2002/0013517) in view of Haller (U.S. Pub 2001/0051787).

Regarding claim 2, West discloses an audial code. However, West does not disclose a *tone which provides an instruction for the patient to contact a nurse*.

Haller teaches a *tone which provides an instruction for the patient to contact a nurse* met by ([0169, lines 22-25] note, audio and instruction “go to the hospital”). It is obvious to provide an indication/noise for a patient to contact a clinician.

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Therefore, it would have been obvious to one of ordinary skill in the art to incorporate Haller's notification into West's because this lets a clinician remotely notify a patient to contact a nurse.

Regarding claim 3, West discloses an audial code. However, West does not disclose *play a prerecorded message to the patient*.

Haller teaches *play a prerecorded message to the patient* met by ([0169, lines 22-25] note, these instructions are pre-recorded before they are sent to the IMD/Comm module). It is obvious to provide a message to a patient.

Therefore, it would have been obvious to one of ordinary skill in the art to incorporate Haller's notification into West because this lets a nurse remotely notify a patient to take their medication.

Regarding claim 5, West discloses determining the status of a radio module. However, West does not disclose determining the status *by polling one access point via unicasting*.

Haller teaches *by polling one access point via unicasting* met by ([0223] note, remote station interrogates one communication module). It is obvious to contact a radio module by polling an access point by unicasting.

Therefore, it would have been obvious to one of ordinary skill in the art to incorporate Haller's unicasting into West because allows the central monitoring station to contact one patient monitoring device.

Regarding claim 6, West discloses determining the status of a radio module. However, West does not disclose determining the status *by PIC based broadcasting*.

Haller teaches *by PIC based broadcasting* met by ([0223] note, remote station can

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interrogate multiple communication modules). It is obvious to use pic-based broadcasting to determine the status of a radio module.

Therefore, it would have been obvious to one of ordinary skill in the art to incorporate Haller's PIC based broadcasting into West because allows the central monitoring station to contact multiple devices that may need new a software/application upgrade.

Regarding claim 7, West discloses a wireless medical telemetry system WLAN based protocol met by ([0045] note, standard data communication protocols). However, West does not disclose *DECT-based protocol*.

Haller teaches *DECT-based protocol* met by ([0119]). It is obvious to use DECT based protocols because of their security features.

Therefore, it would have been obvious to one of ordinary skill in the art to incorporate Haller's DECT-based protocol into West because this protocol offer good security and supports bi-directional communication between a central monitoring station and patient monitoring devices.

Regarding claim 11, West further discloses PMDs periodically broadcasts the status to the access point if the device has not been polled by a predetermined amount of time met by ([0099] note, that patient monitor recognizes communications have been lost and attempts restore communications with an access point).

Regarding claim 16, the claim is interpreted and rejected as claim 6.

Regarding claim 22, the claim is interpreted and rejected as claim 2.

5. Claims 4, 23, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over West

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(U.S. Pub 2002/0013517) in view of Gum (U.S. Patent 6,363,247).

Regarding claims 4, West discloses an audial code. However, West does not disclose a *second audial code*.

Gum teaches *a second audial code* met by (Col. 1, lines 46-48, 56-59, and 62-65; also refer to claim 4). It is obvious to provide an alert to a device with a loud volume to assist in finding a device.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Gum's audible beacon device into West because this would help the hospital staff locate an incapacitated patient lost in a hospital that needs assistance.

Regarding claim 23, the claim is interpreted and rejected as claim 4.

Regarding claim 25, West discloses paging/finding met by (Fig. 2; 20 & [0073, lines 11-15] note, audible notification to patient), determining status of radio module met by (Fig. 24; 540; note, detect loss of communication), a wireless Patient-Monitoring Device PMD met by (Fig. 2; 22b), WLAN network met by (Fig. 2; 30), dual-communication met by (Fig. 2; 30; [0038] note, access points convey communication between patient monitors and central monitoring stations), access points met by (Fig. 2; 26), central-monitoring station met by (Fig. 2; 24), overall status of the PMD comprises one meta-state met by (Fig. 24; 540, 560; note, wireless communication is either connected or not connected, this can be an operational or non-operational device), selecting a particular PMD for changing a meta-state met by (Fig. 24; 560; note, restoring wireless communications changes the device from a non-operational device to an operational one with active states & [0137]), activating audial-code function of the particular PMD met by ([0073] note, speaker, microphone, buzzer, siren, etc..) to emit a predetermined first

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audial-code met by ([0073] note, an audible notification to a clinician, patient, or other user of the monitor & [0083] note, audible messages or signals; note, it is inherent that the controller and audio I/O device need different codes to produce a variety of audible messages, signals or notifications), periodically broadcasts the status to the access point if the device has not been polled by a predetermined amount of time met by ([0099] note, that patient monitor recognizes communications have been lost and attempts restore communications with an access point). However, West does not disclose a *second audial code played*.

Gum teaches a *second audial code* met by (Col. 1, lines 46-48, 56-59, and 62-65; also refer to claim 4). It is obvious to provide an alert to a device with a loud volume to assist in finding the device.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Gum's audible beacon device into West because this would help the hospital staff locate an incapacitated patient lost in a hospital that needs assistance.

6. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over West (U.S. Pub 2002/0013517) in view of Haller (U.S. Pub 2001/0051787) as applied to claim 7 above, and further in view of IEEE 802.11 Std, 1999 Edition (R2003), Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications.

Regarding claim 8, West further discloses a plurality of meta-states that includes operational met by ([0146, lines 10-17] note, active), standby met by ([0146, lines 10-17] note, conserve battery power), PIC-associated met by ([0088] note, this would be the association with the connection of the physical data transport structure), PIC-unassociated met by ([0088] note,

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there would be no association with the connection of the physical data transport structure), PIC-connected met by ([0088] note, this would be the connection with physical data transport structure), PIC-Unconnected met by ([0088] note, there would be no connection with physical data transport structure), AP-associated met by ([0088]), AP-unassociated met by ([0088]), and a designated out-of-range state met by ([0097]). However, West does not explicitly teach *sleep*, *active*, *locked*, *seeking*, *inactive*, *active timing*, and *inactive timing*.

IEEE Std teaches *sleep*, *active*, *locked*, *seeking*, *inactive*, *active timing*, and *inactive timing*. (pg. 129, section 11.2.1.1; lines 6-7 note, power management modes active and doze/sleep, in sleep mode a device is locked so that it can respond to request from access points; Referring to Table 23/Power Save or PS box, note, STA listens which is a seeking mode; lines 17-19 note, for active/inactive timing, probe delay time periods may or may not be used for changing to active/doze modes). It is obvious to manage the functions of a device in a wireless network.

Therefore, it would have been obvious to one of ordinary skill in the art to use the IEEE 802.11 Std in West's patient device system. By utilizing the 802.11 standards the patient monitoring device power management modes can be operated with greater efficiency, thus conserving battery power and communicating vital signs to the central monitoring station.

Regarding claim 9, West further discloses the meta-state the particular PMD is changed to an active state met by ([0146, lines 10-17] note, active/sleep power management modes responsive to communication with central monitoring station).

Regarding claim 10, West further discloses the meta-states further include IP aware & booting met by ([0089, line 5] note, booting the permanent IP address), IP-unaware & rebooting

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met by ([0089, lines 6-7] note, rebooting a temporary IP address).

Response to Arguments

7. Applicant's arguments filed 06/17/2009 have been fully considered but they are not persuasive.

Argument 1: West does not disclose a central monitoring station determining the status of various patient monitoring devices and being able to select a particular patient monitor in which to transmit a signal to change the monitoring device to a desired state if the device is not in the desired state.

In response to this argument it is noted that the central monitoring station determines the status of the patient monitoring devices is not claimed. West's central monitoring station can *control all of the functions of the patient monitor*. This enables a clinician to control a plurality of remotely distributed patient monitors from a single location. In addition, a central station may be configured to enable a clinician to *control all patient monitors* in communication with the central station to function identically. Alternatively, the clinician may *control each patient monitor* to function differently (refer to [0137] if needed). This clearly shows that the central station can selectively pick a particular patient monitoring device and remotely control all functions of that device.

Argument 2: West discloses the central monitoring station detecting when the patient monitor is out of range; West does not disclose determining the status of the wireless monitoring devices in order to determine whether one of more of the wireless monitoring devices is in a desired state.

In response to this argument it is agreed that the central monitoring station can detect if a particular patient monitoring device is in or out of range. West also discloses determining the status of a device (Fig. 24; 540) and determining that it is not in a desired state, and proceeding to put that device back into the desired state by restoring communication (Fig, 24; 560).

Argument 3: West does not disclose changing the meta-state of the wireless monitoring device if it is determined that the wireless monitoring device is not in a desired state. Furthermore, West would be unable to send a change of meta-state signal based on the determination that the wireless monitoring device is out of range because the device would be out of range and thereby not change the wireless monitoring device to a desired state.

In response to this argument West does disclose changing the meta-state of the patient monitoring device. West discloses monitoring the communication between central monitoring station and the patient monitoring device, detecting a loss of communication, and then restoring communication. The transmissions may have been blocked by structures between the patient monitor and the access point, such as when the patient monitor is taken into an elevator or similar enclosure ([0097]). Furthermore, West would be able to send a change of meta-state signal from the central monitoring station to a patient monitoring device.

Argument 4: As per claims 21 and dependent claims 22-23, West does not disclose or fairly suggest a central-monitoring station configured to select a particular PWD/PMD for receipt of a wireless transmission of a change meta-state signal and/or a page/find signal and a PWD/PMD configured to receive the change meta-state signal and change the meta-state of the particular PWD/PMD and/or receive a page/find message and emit an audio signal in response to the received page/find message and wherein the particular PWD/PMD is configured to receive

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the change meta-state signal and change the meta-state of the particular PWD/PMD if a current state is not in the desired state.

In response to this argument West's central monitoring station can *control all of the functions of the patient monitor*. This enables a clinician to control a plurality of remotely distributed patient monitors from a single location. In addition, a central station may be configured to enable a clinician to *control all patient monitors* in communication with the central station to function identically. Alternatively, the clinician may *control each patient monitor* to function differently (refer to [0137] if needed). This clearly shows that the central station can selectively pick a particular patient monitoring device and remotely control all functions of that device. West also discloses an audio input/output device 92, (e.g., speaker, microphone, buzzer, siren, etc.) is also disposed within the housing and adapted to produce an audible notification to a clinician, patient, or other user of the monitor. An alternative to the input/output device would be a bi-directional audio device ([0073]). It is clear that the central monitoring station can send a page/find signal to a particular patient monitoring device so that it emits an audible notification to a patient or a clinician.

Argument 5: As per claim 24, West does not disclose or fairly suggest a processor configured to determine the meta-state of the radio module of the monitoring device and upon reception of a change meta-state signal transmitted from the at least one of a central monitoring stations or a plurality of access points change the meta-state of the monitoring device if the meta-state is not in a desired state.

In response to this argument West's central monitoring station can *control all of the functions of the patient monitor*. This enables a clinician to control a plurality of remotely

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distributed patient monitors from a single location. In addition, a central station may be configured to enable a clinician to *control all patient monitors* in communication with the central station to function identically. Alternatively, the clinician may *control each patient monitor* to function differently (refer to [0137] if needed). The controller is connected to control wireless transceiver and communicate with central stations via the transceiver. The wireless transceiver receives transmissions from one or more access points and forwards the communications to the controller ([0079]). West does disclose the patient monitoring device determining the meta-state of the radio module. Communications dropouts between the patient monitor and the primary central station may occur for a variety of reasons. Once a dropout occurs, the patient monitor begins attempting to restore the communications ([0145]). Or the controller may turn off the display when in communication with a central station to conserve battery power ([0146]). The controller of the patient monitoring device is setup by the central monitoring station.

Argument 6: As per claim 25, West does not disclose determining a status of a radio module of one or more wireless monitoring devices and select a particular PWD/PMD for receipt of wireless transmission of a signal for changing a meta-state of the device to a desired state and selecting a particular PWD/PMD for receipt of wireless transmission of a signal for changing a meta-state of the device to the active state if a current state of the particular PWD/PMD is not in the active state. West does not teach or fairly suggest a central monitoring station that determines the status of a patient monitors. Additionally, West does not disclose selecting a particular patient monitor and transmitting a signal to change the monitoring device to change the monitoring device to an active state if it is determined that the monitoring device is not in an active state.

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In response to this argument West's central monitoring station can *control all of the functions of the patient monitor*. This enables a clinician to control a plurality of remotely distributed patient monitors from a single location. In addition, a central station may be configured to enable a clinician to *control all patient monitors* in communication with the central station to function identically. Alternatively, the clinician may *control each patient monitor* to function differently (refer to [0137] if needed). West determines the status of any desired patient monitor. West detects/determines the status of the patient monitoring device (Fig. 24), and can determine if the patient monitoring device was/is on/off, the radio module is on/off or active/inactive or communications are connected/unconnected, associated/unassociated with an access point, and restore communication with the patient monitoring device.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Wilson whose telephone number is (571)270-5884. The examiner can normally be reached on Monday-Thursday from 8-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu can be reached on (571)272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BPW/

/Daniel Wu/
Supervisory Patent Examiner, Art Unit 2612